US ERA ARCHIVE DOCUMENT

### Tracking #: 8594-5813-270



#### WASHINGTON COUNTY PLANNING COMMISSION

Washington County Administrative Annex 80 West Baltimore Street Hagerstown, Maryland 21740-6003

Telephone: 240-313-2430 FAX: 240-313-2431

Deaf and Hard of Hearing call 7-1-1 for Maryland Relay

December 18, 2006

Ms. Judith M. Katz, Director Air Protection Division (3AP00) U.S. Environmental Protection Agency 1650 Arch Street Philadelphia, Pennsylvania 17108-1086

RE: Washington County, Maryland - Early Action Plan Progress Report

Dear Ms. Katz:

Please find attached the required December 2006 Progress Report for the Early Action Plan for Washington County, Maryland. This submittal documents progress being made to implement the County's Early Action Plan submitted to the U.S. Environmental Protection Agency (EPA) on March 25, 2004.

This submittal continues to report the joint effort between Washington County, the Maryland Department of the Environment (MDE), and the Maryland Department of Transportation (MDOT) in achieving the goal of early attainment of the 8-hour ozone standard in Washington County.

The December 2006 Progress report, consistent with EPA guidelines, documents progress being made regarding implementation of local control measures (including any changes or deletions to the measures since the March, 2004 submittal), assessment of improvements in air quality, assessment of reductions in VOC and NOx emissions, and updates to the summary chart provided in the last report.

In accordance with EPA Regulations and Guidance information, please accept the enclosed document as Washington County's December 31, 2006 progress report, for continuation of the implementation of an Early Action Compact.

If you have any questions or need additional information, please contact the Washington County Planning Department at 240-313-2430.

Sincerely,

Michael C. Thompson

Director, Planning and Community Development

MCT/jlb

Attachment: Washington County Early Action Plan, December 2006 progress report

cc: Tad Aburn, MDE Howard Simons, MDOT Jim Frazier, Michael Baker Jr., Inc. file



December, 2006 Progress Report



#### Submitted to:

United States Environmental Protection Agency Region 3, Air Protection Division 1650 Arch Street Philadelphia, Pennsylvania 17108-1086

#### Prepared by:



Board of County Commissioners of Washington County, Maryland 100 W. Washington St. Hagerstown, Maryland 21740



Maryland Department of the Environment 1800 Washington Boulevard Baltimore, Maryland 21230



Maryland Department of Transportation 7201 Corporate Center Drive, PO Box 548 Hanover, MD 21076



Michael Baker Jr., Inc. 1304 Concourse Drive, Ste. 200 Linthicum, Maryland 21090

December 31, 2006

#### Early Action Plan Progress Demonstration

The Early Action Compact/Plan (EAC) Final Report to the EPA, due on March 31, 2004, and submitted on March 25, 2004, contained a final list of control measures that were chosen for the Action Plan. This correspondence is the required, semi-annual progress report, due on December 31, 2006, and includes any changes made to the above referenced list of final Action Plan Control Measures. It also provides status or updates for these control measures. Based on EPA guidelines issued for the June 2006 progress report, this progress report will also:

- Identify the progress of EAC areas in implementing adopted measures and include any anticipated obstacles and reasonable solutions/substitutions.
- Assess improvements in air quality. Monitoring data will show improvement in the design value, reduced number of days above the standard, etc.
- Assess reductions in NOx and VOC emissions and document any changes.
- Demonstrate how the area is responding to any new issues/challenges to attainment.
- Provide an updated version of the summary chart included in the last report submittal and include it with this submittal.

The EAC is a joint effort of Washington County (the County), the Maryland Department of the Environment (MDE) and the Maryland Department of Transportation (MDOT). On April 15, 2004, the EPA officially designated Washington County as an EAC area and deferred the 8-hour ozone nonattainment designation, provided that all EAC milestones are met and attainment can be demonstrated by December 31, 2007.

Based on EPA guidance for the Early Action Compacts dated, April 4, 2003, Washington County has met all milestones of the EAP. The table below provides a summary of the milestones that have been completed and are required in the future.

#### **Early Action Plan Milestones**

Date	Description	Complete?
December 31, 2002	Initial EAP	✓
June 16, 2003	Potential local emission reduction strategies identified and described.	V
June 30, 2003	Six-month progress report submitted.	✓
December 31, 2003	Detailed discussion of local emission reductions strategies submitted.	V
March 31, 2004	Washington County will complete proposed Ozone Action Plan and submit to AQCC for review.	V
June 30, 2004	Progress report for updates to the March 31 <sup>st</sup> submittal	V
December 31, 2004	Semi-annual EAC progress report identifying progress, schedules, and changes to EAP	<b>V</b>
December 31, 2004	MDE in cooperation with Washington County will incorporate EAP into SIP and submit to EPA.	<b>&gt;</b>
February 28, 2005	Washington County EAC SIP Addendum submitted to EPA	V
May 3, 2005	EPA's Approval and Promulgation of Air Quality Implementation Plans; Maryland; Attainment Demonstration for the Washington County Early Action Compact Area.	V
May 17, 2005	Notice of Proposed Rulemaking was published in the Federal Register, officially starting the 30-day public comment period.	<b>&gt;</b>
June 16, 2005	Public comment period ends and pending comments, EPA expected to approve EAC in July 2005.	V
June 30, 2005	Submit the semi-annual progress report.	✓
December 31, 2005	Washington County implements the local control measures that have been incorporated into the SIP. Submit the semi-annual progress report.	V
June 30, 2006	Washington County certifies progress toward attainment since previous milestone, e.g., continued implementation and progress toward improvement in air quality and emissions reductions.	V
December 31, 2006	Submit the semi-annual progress report.	V
June 30, 2007	Submit the semi-annual progress report.	
December 31, 2007	Washington County attains the 8-hour ozone NAAQS.	

#### Summary of Progress Report for June 30, 2006

The December 31, 2006 progress report is an update on the status of the efforts that were planned for in the Final EAP submitted on March 31, 2004.

#### Stakeholder Process

The Washington County Department of Planning and Community Development, the lead County Department for the EAP effort, continues to make available to each stakeholder all EAC documents including the Final EAP Report and solicits input on all documents, along with encouraging stakeholder participation in future events.

The County, in consultation with MDE and MDOT, will continue to develop a schedule of stakeholder activities, including public meetings, conference calls, and anticipated availability of technical and other information. As needed, stakeholders will be divided into sub-committees to address such issues as: public participation and information, inventory and modeling, review of named and potential emissions control measures by source, evaluation of emission control measures by source category or other sub-committees subsequently identified.

#### Meetings

A number of meetings regarding the Washington County EAC were conducted since the June 30, 2006 submittal. Below is a summary of the meetings.

Date	Meetings/Actions
June 8, 2006	HEPMPO AQ conformity conference call
June 13, 2006	Air Quality Action Days training session
June 14, 2006	Air Quality Action Days training session
June 15, 2006	Air Quality Action Days training session
June 19, 2006	Air Quality Action Days training session
June 2006	Launch of new permits and inspections web site (e-government)
July 18, 2006	Presentation of the Fuel & Vehicle Task Group Final Report
September 13, 2006	Technical Advisory Committee and Interstate Council meeting
September 25, 2006	HEPMPO AQ conformity conference call
October 27, 2006	Interagency Consulting Meeting
November 27, 2006	Technical Advisory Committee and Interstate Council meeting

3

#### Implementation Progress

With the exception of some Federal measures which have not yet come online, all state and local control measures were effectively implemented at the time of the December 31, 2005 Progress Report submittal.

#### Anticipated Obstacles & Reasonable Solutions

Washington County does not anticipate any obstacles to reaching attainment of the 8-hour Ozone Standard at this time. Please see the air quality improvements section below for further evidence.

#### Additional Controls Impacting Washington County

This section describes some additional measures that are anticipated to help Washington County further its air quality goals, though credit for these measures has not been taken.

The MDE maintains a web page, which is frequently updated and houses information regarding Maryland's Clean Power Regulations and the Maryland Healthy Air Act. The website can be found using the following link:

<u>http://www.mde.state.md.us/Air/MD\_CPR.asp</u>. A brief description of Maryland's Clean Power Regulations and Healthy Air Act follows.

#### The Maryland Clean Power Regulations

On November 17, 2005, Governor Robert L. Ehrlich, Jr. announced the development of the Maryland Clean Power Regulations, which would significantly reduce air pollution from Maryland's largest and oldest power plants. The Clean Power Regulations were developed with the purpose of bringing Maryland into attainment with the National Ambient Air Quality Standards (NAAQS) for ozone and fine particulate matter by the federal deadline of 2010. The regulations would also reduce mercury emissions from coal-fired electric generating units and significantly reduce atmospheric deposition of nitrogen to the Chesapeake Bay and other waters of the State. This regulation would be the most aggressive emission-reducing program ever enacted in Maryland.

#### The Maryland Healthy Air Act

Following commencement of the promulgation process for the Clean Power Regulations, the Maryland General Assembly began development of the Maryland Healthy Air Act. The Healthy Air Act (HAA) closely mirrored the Clean Power Regulations and Governor Ehrlich signed this bill (Senate Bill 154) into law on April 6, 2006:

"Together with the Chesapeake Bay Restoration Act, today's announcement makes Maryland an undisputed national leader in air and water quality protection," said Governor Ehrlich. "Based on the Clean Power Rule I introduced last November, lawmakers redrafted the Healthy Air Act to minimize the threat it originally posed to Maryland's energy supplies."

The Maryland General Assembly record related to the Healthy Air Act and the final version of the Act itself can be found at:

http://mlis.state.md.us/2006rs/billfile/SB0154.htm

The Healthy Air Act is the toughest power plant emission law on the east coast. The HAA requires reductions in nitrogen oxide (NOx), sulfur dioxide (SO<sub>2</sub>) and mercury emissions from large coal burning power plants. The Healthy Air Act also requires that Maryland become involved in the Regional Greenhouse Gas Initiative (RGGI) which is aimed at reducing greenhouse gas emissions.

NOx is the most important pollutant contributing to Maryland's ground-level ozone or "smog" problem and also contributes significantly to nitrogen pollution in the Chesapeake Bay. SO<sub>2</sub> is the most important contributor to Maryland's fine particulate air pollution problem and also has a significant role in creating regional haze that degrades visibility.

MDE is charged with implementing the HAA through regulations. Once enacted, these regulations will constitute the most sweeping air pollution emission reduction measure proposed in Maryland history.

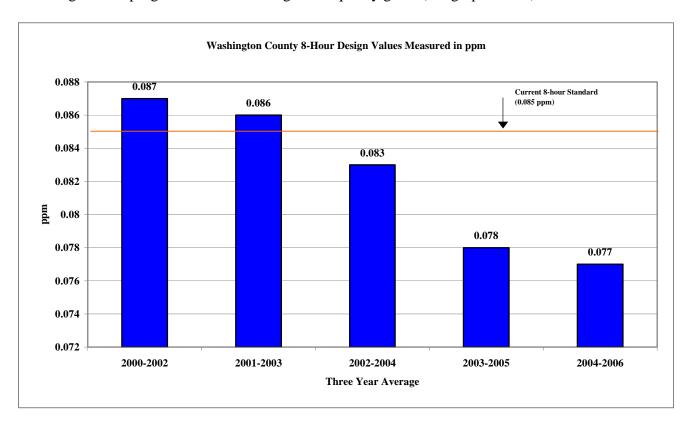
#### Overview of Expected Emission Reductions

Over 95% of the air pollution emitted from Maryland's power plants comes from the largest and oldest coal burning plants. The emission reductions from the HAA come in two phases. The first phase requires reductions in the 2009/2010 timeframe and, compared to a 2002 emissions baseline, reduce NOx emissions by almost 70%, SO<sub>2</sub> emissions by 80% and mercury emissions by 80%.

The second phase of emission control occurs in the 2012/ 2013 timeframe. At full implementation the HAA will reduce NOx emissions by approximately 75% from 2002 levels, SO<sub>2</sub> emissions will be reduced by approximately 85% from 2002 levels, and mercury emissions will be reduced by 90%.

#### Air Quality Improvements

Air quality improvements in Washington County can be measured utilizing air quality monitor data obtained from the Washington County ozone monitor, which is located on Roxbury Road in Hagerstown at the Maryland Correctional Institute. The design value for the 8-hour ozone standard is based on the 4<sup>th</sup> highest ozone reading for each year and averaged over three years. The 8-hour ozone standard is 0.085 parts per million (ppm). As evidenced by the downward trend in design values, Washington County has made significant progress toward reaching its air quality goals (see graph below).



Based on the current design value, 2004-2006 above, Washington County would be in attainment of the 8-hour standard. This downward trend is anticipated to continue, resulting in the demonstration of a design value less than the ozone standard in 2007.

In addition to achieving a downward trend in the ozone design value, Washington County has also achieved a considerable reduction in the number of days exceeding the standard.

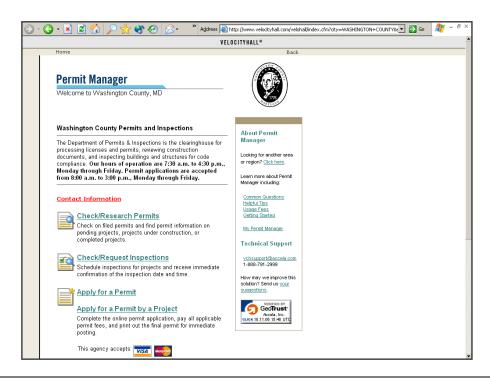
#### Updates to Action Plan Control Measures

The EAP Control Measures report submitted to the EPA in March 2004 and approved by the Board of Commissioners was implemented on schedule in Washington County. The action plan provides a detailed list, description and analysis of all of the control measures selected by the County.

This progress report includes, in Appendix A, an updated version of the summary table of the control measures submitted in the June 2006 progress report as per EPA's

recommendations. Most of the measures have been implemented on schedule without any changes. Any updates or changes made to the control measures since the June 2006 submittal have been documented in this report. New information was available for the following control measures, though the emission estimates did not change:

- Clean Air Partners (CAP)/Public Education Outreach CAP is a volunteer nonprofit consortium of governments, businesses, organizations and individuals working together to improve the health of individuals and the environment of the Washington and Baltimore metropolitan regions, including Washington County, by reducing ground-level ozone and particulate pollution. CAP works to educate employers, businesses and the public to take voluntary actions that reduce air pollution, specifically on days when the air quality is especially poor. CAP contracted PRR to develop an outreach strategy for 2006 that would both educate the public on the health threats surrounding Code Orange air quality days and encourage businesses, organizations and individuals to reduce air pollution through simple, voluntary actions. In order to raise public awareness around the health affects of Code Orange air quality and continue to position CAP as the leading authority on local air quality issues, PRR employed a comprehensive strategy that incorporated marketing, media relations, research and graphic design. More information regarding the 2006 CAP program and it's marketing strategy can be found in Appendix G.
- E-commerce/E-government In June 2006, the Washington County Permits and Inspections Department launched a new website with Velocity Hall to allow the public to apply for trade permits, check the status of existing permits, and schedule inspections online (see screen capture below). In October 2006 the website received 2,100 hits while accepting 90 permits online. <a href="https://www.velocityhall.com/washingtoncounty">www.velocityhall.com/washingtoncounty</a>



- Fuel and Vehicle Task Force On July 18, 2006 the final report of the Fuel and Vehicle Task Group was presented to the Board of County Commissioners (BOCC) of Washington. As a result of the efforts of the group, further direction was given by the BOCC to implement or further study some of the recommendations. The final report was included in the June, 2006 progress report to EPA. A copy of the presentation made to the BOCC, as well as a critical tasks memorandum can be found in Appendices E and F.
- Air Quality Action Days Training Sessions were held on June 13, 14, 15, & 19, 2006. Visits to various County departments were made in order to provide informative training to employees regarding Air Quality Action Days. Approximately 200 employees attended the trainings. Please see Appendix D for a copy of the presentation.

No new information is available for all other control measures and they continue to be on schedule for implementation at this time. Washington County has not experienced any problems or changes other than those previously mentioned since June 2006.

Following is the list of the Action Plan Control Measures. The measures are divided into two main categories: State and Local control measures and Federal control measures. The emission reduction credit taken for each measure is also listed in the tables below.

#### 1. State and Local Measures:

All control measures, falling under the State and Local control measures category, are already in place. A complete description of each measure is provided in Appendix A. The table below summarizes these measures and credits taken.

**State and Local Control Measures – Summary Table** 

Control Measures	Emissions VOC (Kg/day)	s Reductions NOx (Kg/day)		
Ride-Matching/Commuter Connections	1.52	1.44		
Park & Ride Lots	2.92	3.04		
<ol> <li>Telework Center</li> <li>Telecommuting</li> </ol>	0.19 2.87	0.22 3.12		
Air Quality Action Days	Voluntary Progra	am - No credit taken		
Clean Air Partners/Public Education Outreach	Voluntary Progra	am - No credit taken		
Transit Programs in Washington County 1. County Commuter Bus Services (9 routes) 2. Turning Point Transit Services 3. Commuter Bus Service from Hagerstown to Shady Grove Metro Station	5.30 0.43 1.65	4.19 0.41 1.75		
E-government/E-commerce Enhancements	1.59	0.31		
Fuel & Vehicle Task Group	Credit not taken.			
Growth Management Program	13.24	15.42		
Signal System Enhancements  1. US-40: Cleveland Ave. to Edgewood Rd.  2. MD-65: Doub Way to Henry Douglas Dr.  3. US-11:  Penn. Ave. at Northern Ave.  Penn. Ave. at Fariview Rd. – Park Ln.  Penn. Ave. at Prospect St.  Burhans Blvd. at Park Ln.	6.00 4.22 9.57	1.81 1.27 3.06		
Incident Management/Intelligent Transportation Systems (ITS)  1. Highway Advisory Radio (3 locations)	17.59	7.99		
On-Road Vehicle Acquisitions  1. Fleet Replacement (SHA - 2 vehicles)  2. Transit Fleet Replacement  3. Transit Engine Re-build  4. Fleet Replacement (MTA - 1 vehicle)	0.01 - 0.02 1.49 0.00	0.01 13.6 0.00 0.00		
Vehicle Emissions Inspection Program (VEIP)	480.81	562.46		
OTC Programs 1. Consumer Products 2. Architectural and Industrial Maintenance 3. Portable Fuel Containers	108.86 92.18 54.43	0.00 0.00 0.00		
Low Emissions Paint	26.28	0.00		
Off-Road Vehicle Replacement	Credit not taken, as it is not quantifiable			
RACT Controls	0.00	1,312.31		

<u>Note:</u> Positive numbers imply reduction in emissions and negative numbers imply increase in emissions.

#### 2. Federal Control Measures

This section identifies the control measures implemented and regulated at the federal level. They include engine standards, fuel requirements, and stationary source controls that will be implemented by 2005 or phased-in implementation schedule completed by 2007. The federal control measures, outlined in the summary table below, will apply to Washington County and the entire state of Maryland. Please see Appendix A for a complete description of each measure.

**Federal Control Measures – Summary Table** 

	<b>Emissions Reductions</b>					
Measure	VOC (Kg/day)	NOx (Kg/day)				
NLEV	81.65	99.79				
Tier II	780.18	2,821.35				
HDE Standard	0.00 172.37					
Phase I & II Engine Standards	Credit not taken. Expect reduction by 2005.	Credit not taken. Expected VOC benefit = 30% reduction by 2005.				
Engine Standards for Diesel Powered Engines	Credit not taken. Expected NOx benefit = 25% reduction in new engines by 2005.					
Engine Standards for Gasoline Powered Marine Engines	Credit not taken. Expected VOC benefit = 25% reduction in new engines by 2005.					
Engine Standards for Large Gasoline Powered Engines	Credit not taken. Expected VOC benefit = 20% reduction by 2005. Expected NOx benefit = 20% reduction by 2005.					
Engine Standards for Locomotive Engines	Credit not taken. Expected VOC benefit = 30% reduction by 2005. Expected NOx benefit = 30% reduction by 2005.					
NOx SIP Call  Credit not taken. Expected NOx benefit = 5 reduction from 2003 levels by 2009.						

#### Acronyms:

28. VDOT

29. VEIP

30. VMT

31. VOC

1. AQAD - Air Quality Action Days 2. BMC - Baltimore Metropolitan Council 3. CAP - Clean Air Partners 4. CCTV - Closed Circuit Television 5. CHART - Coordinated Highways Action Response Team 6. DMS - Dynamic Message Signs 7. EAC - Early Action Compact 8. EAP - Early Action Plan 9. EPA - Environmental Protection Agency - Federal Highway Administration 10. FHWA 11. HAR - Highway Advisory Radio 12. HDE - Heavy Duty Engines 13. ITS - Intelligent Transportation Systems 14. IVR - Interactive Voice Response 15. MDE - Maryland Department of Environment 16. MDOT - Maryland Department of Transportation 17. MTA - Maryland Transit Administration 18. MVA - Motor Vehicle Administration (Maryland) 19. MWCOG - Metropolitan Washington Council of Governments - National Ambient Air Quality Standards 20. NAAQS - National Low Emissions Vehicle 21. NLEV 22. NOx - Oxides of Nitrogen 23. OTR - Ozone Transport Region 24. RACM - Reasonably Available Control Measures 25. RACT - Reasonably Available Control Technologies 26. SHA - State Highway Administration (Maryland) 27. SIP - State Implementation Plan

- Virginia Department of Transportation

- Vehicle Emissions Inspection Program

- Vehicle Miles Traveled

- Volatile Organic Compounds

#### APPENDIX:

- A. Control Measures Summary Table
- B. Assessment of Progress For Early Action Compact Areas
- C. Maryland Healthy Air Act Presentation
- D. Air Quality Action Days Presentation
- E. Fuel and Vehicle Task Force Presentation
- F. Fuel and Vehicle Task Group Critical Tasks Memorandum
- G. 2006 Clean Air Partners Program Information

#### APPENDIX - A

A. Control Measure	B. Summary Description of Measure	C. Program/Measure Status	D. Specific Implementation Date	E. VOC Reduction	F. NOx Reduction	G. Resources (FTE's, \$\$)	H. Additional Information
31 Washington Co., M State & Local Measures:	D (Effective date of nonattainment designation deferred)						
Ride-Matching / Commuter Connections	Incentives and support for Car & Vanpool Programs. There are approximately 143 commuters participating in these programs in Washington County. Responsible agency: MWCOG & MTA.	Implemented. Participation up to 143 commuters from 134 commuters since previous review.	Implemented June, 2005	1.52 kg/day	1.44 kg/day		http://www.mwcog.org/commuter/ccindex .html http://www.mtamaryland.com/resources/t ransitlinks/mdridesharing/
Park and Ride lots	Existing Park & Ride Lots in the county (8 PNR Lots with 717 total parking spaces. Utilization rates as per SHA's 2005 Park Ride Inventory). Responsible agency: MDOT.	Implemented. Average utilization of PNR Lots up from 56% to 91% as per SHA 2006 data.	Implemented June, 2005	2.92 kg/d	3.04 kg/d		Based on SHA's 2005 Park & Ride Inventory data.
Telecommuting	Telework center in Hagerstown (32 workspaces at 78% utilization)     Responsible agency: State/Federal Government.     Telecommuting Outreach Program (home-based teleworkers)     Responsible agency: MWCOG.	Implemented. Utilization rate for telework center increased by 14% from 22 workspaces to 25. Increase in outreach efforts by federal agencies. Additional credit not taken.	Implemented June, 2005	3.1 kg/d	3.3 kg/d		
Air Quality Action Days	The Air Quality Action Days program and air quality forecasting efforts currently in place in Baltimore and Washington DC has been expanded to Washington County. The Air Quality Action Days program is a voluntary initiative by government, environmental groups, and business leaders working with the general public to take extra action to prevent air pollution when unhealthy air pollution levels are predicted. When the air quality is predicted to be unhealthful in both the Baltimore and Washington areas, MDE issues Air Quality Action Day notices to media outlets, government agencies, and Air Quality Action Day participants. Daily forecasts for the Baltimore/Washington area and Washington County are also available on MDE's website and on the Air Quality Hotline. Washington County will create a web page that will contain information and links for air quality.	Implemented. Adopted on December 6, 2005. Washington County's website	Implemented December, 2005	NQ	NQ		http://www.washco-md.net/air_qual.shtm
Clean Air Partners/Public education outreach	Clean Air Partners is a volunteer, nonprofit, public-private partnership chartered by the Metropolitan Washington Council of Governments (MWCOG) and the Baltimore Metropolitan Council (BMC) and has been expanded to include Washington County. The Partnership seeks to improve health and the quality of life in the region by educating the public to take voluntary action to reduce ground-level ozone and to reduce exposure to ozone. It will build and broaden awareness of how individuals contribute to air pollution while informing them about the adverse effects of ground level ozone. Transportation grants from the District of Columbia, MDOT, VDOT, and grants from private sector partners and MWCOG fund the operation. BMC, MDE and private sector partners contribute large amounts of in kind services.	Implemented. Washington County will conduct air quality training sessions for its employees twice per year. In addition to this, information will be distributed to county employees via attachments to paychecks and periodic articles in the County Employee newsletter.	Implemented June, 2005	NQ	NQ		
Transit programs in Washington County	County commuter bus service (9 routes), turning point transit services and commuter bus service from Hagerstown to Shady Grove Metro Station.	On-going.	Implemented June, 2005	7.4 kg/d	6.4 kg/d		
E-gov/e-commerce enhancement	Use of advanced technology to enhance government permits, administration and information distribution. Responsible agency: IVR/Permits Plus. Trips reduced or eliminated by using on-line and telecommunication services from MVA and Washington County's website. Washington County to implement services to assist permits and inspections.	Implemented. County permit inspectors can now file paperwork and receive information using wireless technology in the field.	Implemented December, 2005	1.6 kg/d	0.3 kg/d		
Fuel and Vehicle Task Group	The Washington County government has established a new task group called the 'Fuel and Vehicle Task Group', staffed by eight representatives of County departments with a primary aim to develop a plan to reduce fuel consumption, look into alternative fuel products and other things that could help reduce costs to the County. Responsible Agency: Washington County.	Implemented	Implemented December, 2005	NQ	NQ		
Growth management program	Hopewell Valley Promotion - policies that integrate transportation and land use decisions. Responsible agency: Washington County.	Implemented	Implemented June, 2005	13.2 kg/d	15.4 kg/d		

A. Control Measure	B. Summary Description of Measure	C. Program/Measure Status	D. Specific Implementation Date	E. VOC Reduction	F. NOx Reduction	G. Resources (FTE's, \$\$)	H. Additional Information
Signal system enhancements	State Highway Administration upgraded the signal systems on 3 corridors in Washington county which will improve traffic flow and reduce idling delay at intersections:  1. US-40: Cleveland Avenue to Edgewood Road.  2. MD-65: Doub Way to Henry Douglas Drive.  3. US-11: Penn. Ave. at Northern Ave.  4. US-11: Penn. Ave. at Fairview Rd. to Park Ln.  5. US-11: Penn. Ave. at Prospect St.  6. Burhans Blvd. at Park Ln.	Implemented. Signal improvements done for additional locations in the city of Hagerstown. Credit not taken for items 1 and 2. Credit taken in June 2006 for items 3-6.	Items 1 & 2	19.79 kg/d	6.14 kg/d		
Incident mgt/Intel trans. System	On-going and planned Incident Management programs by CHART in Washington County. Highway advisory radio in 3 locations	Implemented	Implemented June, 2005	17.6 kg/d	8 kg/d		
On-road vehicle acquisitions	The following on-road vehicle replacements are scheduled in Washington County:  1. Fleet Replacement (SHA - 2 vehicles)  2. Transit fleet replacement (Bus replacement) a) Turning Point: one replacement. b) County Commuter: 5 scheduled replacement. 3. Transit engine re-built (Installation of Emissions Reduction Devices on Engine Re-build). County Commuter: 9 engine re-builds. (The state highway fleet replacement will be implemented at no cost to the county.) 4. Fleet Replacement (MTA - 1) vehicle	Implemented	Implemented December, 2005	1.5 kg/d	13.7 kg/d		
Vehicle Emissions Inspection Program (VEIP)	The Vehicle Emissions Inspection Program, mandated in Maryland and enforced by MDOT and MDE, includes an OBD II and IM240 program.	Implemented	Implemented June, 2005	480.8 kg/d	562.5 kg/d		
OTC- consumer products	Consumer Products (CP): Beginning in January 2005, this rule will establish limits, expressed as percent VOC by weight, upon the concentration of VOCs contained in approximately 80 categories and subcategories of consumer products.	Implemented	Implemented June, 2005	109 kg/d	0		
OTC-architectural and industrial maintenance	Architectural and Industrial Maintenance (AIM): This rule sets specific VOC content limits (in grams/liter) for 46 AIM coating categories. It requires compliance with the limits by January 1, 2005. In most cases, these limits are more stringent than existing Federal AIM rules.	Implemented	Implemented June, 2005	92 kg/d	0		
OTC-portable fuel containers	Portable Fuel Containers (PFC): The regulation applies to new gas cans and spouts sold in Maryland starting January 1, 2004. The rule applies to any person or entity that sells, supplies, offers for sale, or manufactures for sale gas cans and/or spouts; and is intended to reduce VOC emissions from storage, transport, and refueling activities.	Implemented	Implemented June, 2005	54 kg/d	0		
OTC-low emissions paint	Use low emissions yellow and white paint for markings on roadways in county.	Implemented	Implemented June, 2005	26 kg/d	0		
Off-road vehicle replacements	Landfill vehicle replacements in Washington County include a Dozer and a Compactor in 2002 and a Tractor Mower in 2004.	Implemented	Implemented June, 2005	NQ	NQ		
RACT Controls Post 1999 inventory RACT	The entire state of Maryland in located in the Northeast Ozone Transport Region (OTR) and is subject to RACT controls for major stationary sources. The sources located in Washington County that are subject to RACT, along with their tons per year emissions benefits, can be found in the EAC SIP.	Implemented	Implemented June, 2005	0	1312 kg/d		

A. Control Measure Federal Control Measures:	B. Summary Description of Measure	C. Program/Measure Status	D. Specific Implementation Date	E. VOC Reduction	F. NOx Reduction	G. Resources (FTE's, \$\$)	H. Additional Information
NLEV	Under the National Low Emission Vehicle program auto manufacturers have agreed to comply with tailpipe standards that are more stringent than EPA can mandate prior to model year 2004. The NLEV program was instituted by the OTC states in 2001. Maryland opted into the program in 1999, two years prior to the OTC adoption	Implemented.	Implemented 1999	81.65 kg/day	99.79 kg/day		
TIER II	Tailpipe standards are set at an average standard of .07 grams per mile for NOx for all classes of passenger vehicles beginning in 2004. Vehicles weighing less than 6,000 pounds will be phased-in to this standard between 2004 and 2007. Beginning in 2004, the nation's refiners and importers of gasoline will have the flexibility to manufacture gasoline with a range of sulfur levels as long as all of their production is capped at 300 ppm. By 2006, refiners will meet a 30 ppm average sulfur level with a maximum cap of 80 ppm.	Implemented	Implemented 2004	780.18 kg/day	2821.35 kg/day		
HDE Standard	A PM emissions standard of .01 grams per brake-horsepower-hour for new heavy-duty engines is scheduled to take full effect in the 2007 model year. In addition, refiners will be required to start producing diesel fuel for use in highway vehicles with a sulfur content of no more than 15 ppm, beginning on June 1. 2006.	On-schedule.	Implementation by 2007	0 kg/day	172.37 kg/day		
Phase I & II Engine Standards	Phase I emission standards for non-road, handheld and non-handheld engines operating at or below 19 kW took effect in model year 1997. Phase II standards for non-road, non-handheld Class I and II engines operating at or below 19 kW will be phased in beginning in model year 2002 and will be complete by 2007.	On-schedule.	Implementation years 1997 & 2002	NQ	NQ		Credit not taken. Expected VOC benefit = 30% Reduction by 2005
Engine Standards for Diesel Powered Engines	A three-tiered process, beginning in 1996 and continuing through 2008, will increase emissions standards for non-road diesel powered engines used for a variety of purposes such as construction & agriculture.	On-schedule.	Implementation years 1996, 2001 & 2006	NQ	NQ		Credit not taken. Expected NOx benefit = 25% Reduction in new engines by 2005
Engine Standards for Gasoline Powered Marine Engines	Outboard engine standards began in 1998 and will be phased in through 2006. Inboard standards were set in 2000. Auxiliary Marine engines that operate at less than 25hp were subject to emission standards beginning in 1997. A second phase of emission standards for these engines will be phased in between 2001 and 2005. Auxiliary engines that operate above 25hp will need to meet the requirements for the same size land-based non-road spark-ignition engines.	On-schedule.	Implementation years 1997, 1998, 2000 & 2001	NQ	NQ		Credit not taken. Expected VOC benefit =25% reduction in new engines by 2005
Engine Standards for Large Gasoline Powered Engines	A two-tiered standard with Tier 1 beginning in 2004 and Tier 2 beginning in 2007. These standards will regulate non-road gasoline powered engines rated over 19kW.	On-schedule.	Implementation years 2004 & 2007	NQ	NQ		Credit not taken. Expected VOC benefit = 20% Reduction by 2005. Expected NOx benefit = 20% Reduction by 2005
Engine Standards for Locomotive Engines	A three-tiered emission standard for new or remanufactured locomotive engines.	On-schedule.	Implementation years 1973, 2002 & 2005	NQ	NQ		Credit not taken. Expected VOC benefit = 30% Reduction by 2005. Expected NOX benefit = 30% Reduction by 2005
NOx SIP Call/Clean Air Interstate Rule	This federal rule and state regulation will be implemented to further reduce NOx emissions from major NOx sources. On March 10, 2005, the Environmental Protection Agency (EPA) announced the Clean Air Interstate Rule (CAIR), a rule that will achieve the largest reduction in air pollution in more than a decade. This action, offers steep and sustained reductions in air pollution as well as dramatic health benefits at more than 25 times greater than the cost by 2015.	On-schedule.	Implementation by 2005	NQ	NQ		Credit not taken. Expected NOx benefit = 53% Reduction from 2003 levels by 2009.

#### APPENDIX - B



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III 1650 Arch Street Philadelphia, Pennsylvania 19103-2029

**SUBJECT:** Assessment of Progress

For Early Action Compact Areas

**FROM:** Makeba Morris, Chief

Air Quality Planning Branch

**TO:** Barbara Driscoll, Acting Group Leader

Geographic Strategies Group (C539-04)

**DATE:** July 27, 2006

We are pleased to acknowledge receipt of the June 30, 2006 progress assessments from each of the four Early Action Compact (EAC) areas in Region 3: Washington County, Maryland, Roanoke, Virginia, Northern Shenandoah Valley (City of Winchester and Frederick County) Virginia, and the Eastern Panhandle (Berkeley and Jefferson Counties), West Virginia. The submittals were received on time and meet the requirements specified for semi-annual reports in the *Protocol for Early Action Compacts Designed to Achieve and Maintain the 8-Hour Ozone Standard* and include the documentation requested in the 8-Hour Ozone National Ambient Air Quality Standards (NAAQS) Final Rule, published April 30, 2004 (69 FR 23858).

Our review of each of the June 2006 submittals finds that sufficient progress toward implementing all of the required activities in the EAC State Implementation Plan (SIP) is being made.

If you have any questions, please contact me, or Ellen Wentworth or Rose Quinto of my staff, at your convenience.



#### APPENDIX - C



### **Department of the Environment**

# The Maryland Healthy Air Act



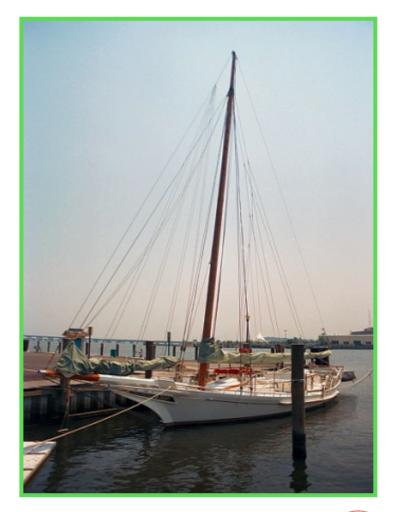
Tad Aburn, Air Director, MDE
MD-DC Utilities Association
October 18, 2006





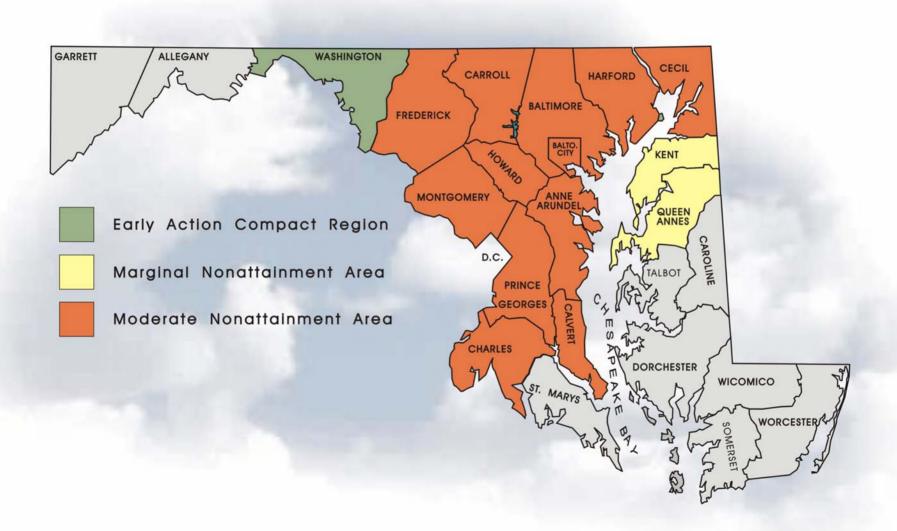
# Maryland's Air Quality

- Dramatic improvement over the last 10 years ... however
- Ground level ozone
  - Significant clean-up
  - But we still monitor levels above the new health-based standard
- Fine particulate
  - Levels are generally very close to - but above - the federal health based standard
- Regional haze
- Air pollution contributes significantly to Bay pollution



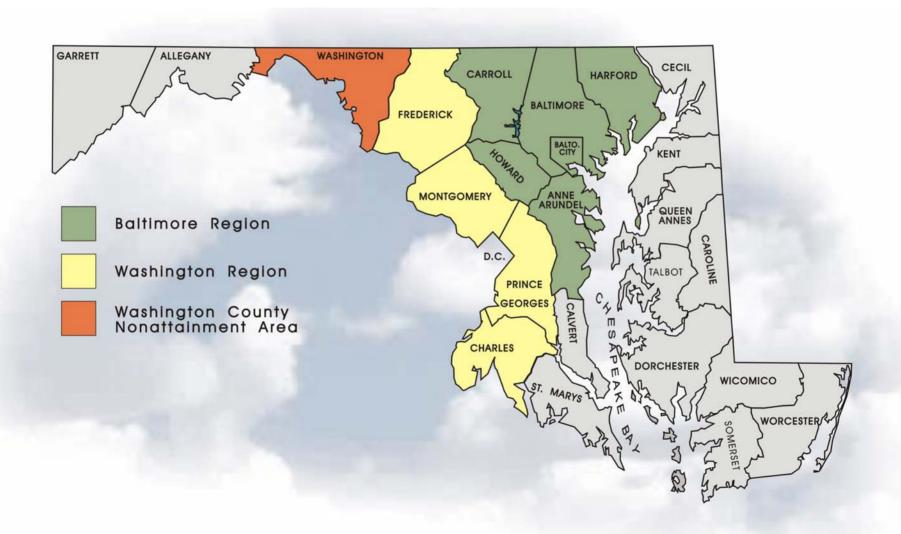


### **New Ozone Nonattainment Areas**





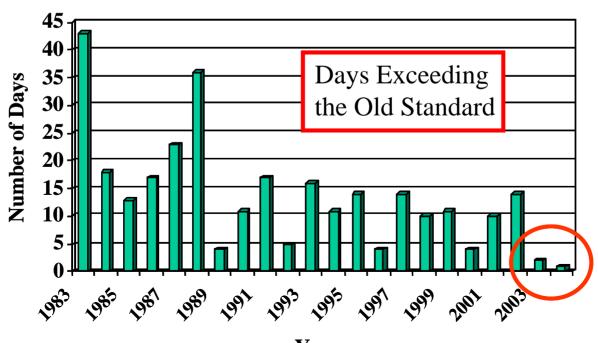
### **New Fine Particle Nonattainment Areas**





### Good News – Ozone Levels

- Monitored levels are lower than they have ever been
- Maryland actually "attained" the old ozone standard in 2005\*
  - A huge accomplishment, at one point thought to be impossible
  - Maryland's air quality plan (or SIP) worked!!
  - Old standard was replaced with a new tougher standard in 2005



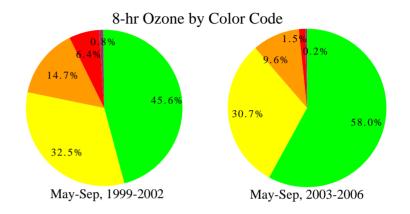


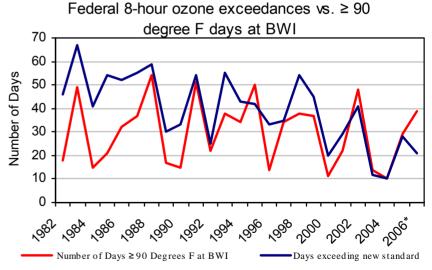
**Years** 



### More Good News on Ozone Levels

- Maryland areas designated as "Moderate" under new standard
  - Not "Severe" as they were through 2005
- Many counties already monitor levels below the new standard
- Exceedance days under the new standard have also dropped dramatically
  - 2003 to 2006
    - 70 Days above the standard
  - 1999 to 2002
    - 135 Days above the standard
- Bad air days are generally cleaner (lower monitored levels) and occur in smaller areas

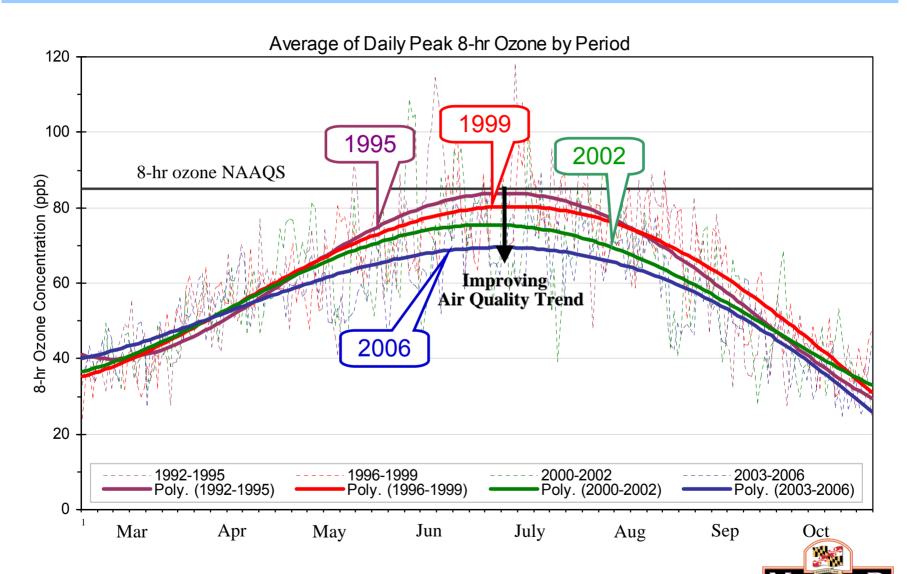








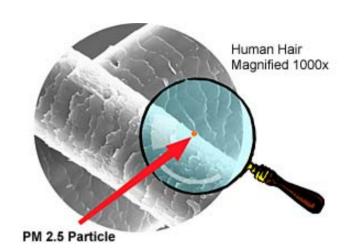
# Continuous Improvement





# Good News – Fine Particles

- Several historical nonattainment counties in Maryland were not identified as PM2.5 nonattainment
  - Cecil, Kent, Queen Anne's, Calvert
- Existing regulations have helped reduce PM fine pollution
  - NOx controls, fuels, acid rain
- PM Fine levels have already started to decrease
  - First Maryland SIP not due until 2008
- Annual PM Fine levels have dropped at 14 of 17 monitors across the state between 2002 and 2005
  - All but one monitor has shown decreasing values under the daily standard
- At the state's highest monitor (Southeast Police Station) the drop in annual levels has been 1.5 ug/m3 (from 17.4 to 15.9)

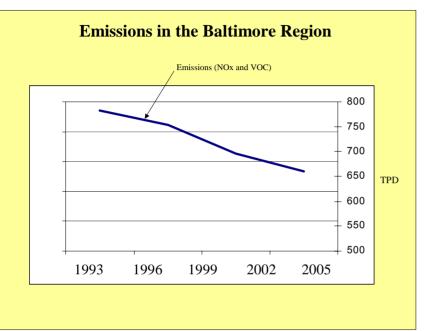








### Good News – Local Reductions





- Maryland has implemented one of the country's most comprehensive set of air pollution control regulations
  - Power plants to hair spray and perfume
  - Over 100 different regulations since 1990
- Emissions in Maryland have been cut by about 40% since 1990
  - National average is about 20%

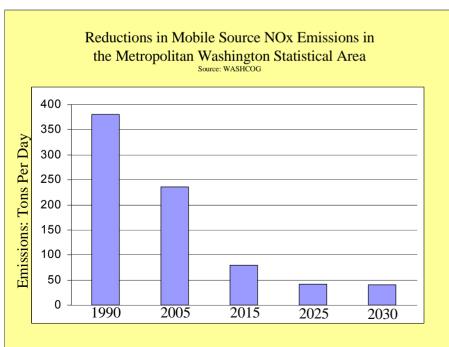




### Good News – Mobile Source Reductions





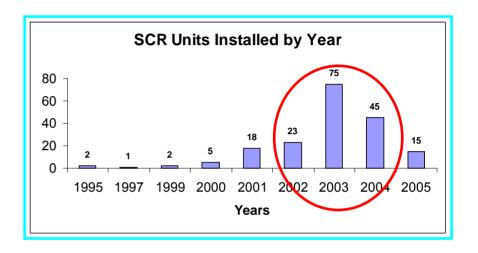


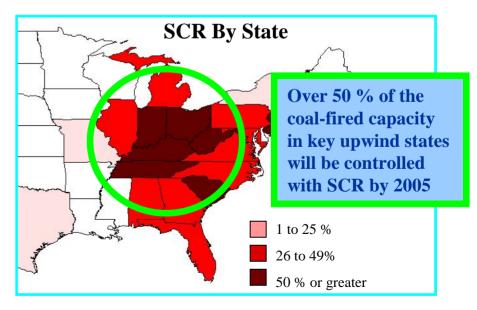
- Maryland programs like the vehicle inspection program combined with federal motor vehicle emission requirements have reduced mobile source emissions in Maryland by about 50% since 1990.
- Significant additional reductions are phased in in 2004 and 2007
- By 2030 mobile source emissions are projected to be 11% of what they were in 1990.
- These reductions include significant projected growth in Vehicle Miles Traveled (about 40%)



### Good News - Power Plant Reductions

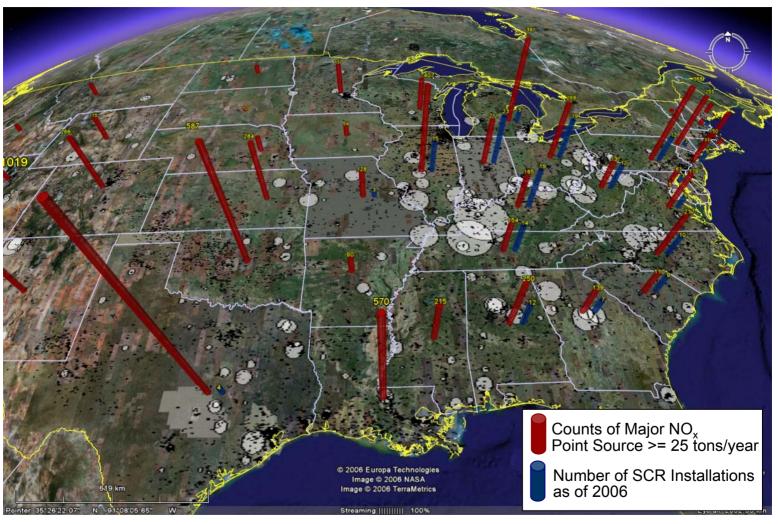
- Significant reductions from regional power plants between 2002 and 2006
- Billions of dollars being invested in "Selective Catalytic Reduction" (SCR) technology to reduce power plant NOx emissions







# Where Are the SCR Being Installed?



Majority of SCR installation in states "upwind" of Maryland





### New Air Quality Standards - A Transition Period

- New air quality standards for ozone and fine particulate became effective in 2005
  - Requires plans in 2007/2008 and attainment by 2010
- The 1hr Ozone Standard was revoked on June 15<sup>th</sup>, 2005
- 2005 and 2006 will be a period of transition

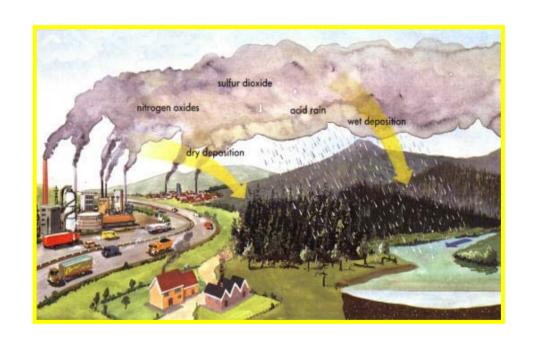






## The Maryland Healthy Air Act

- Largest emission reducing program ever adopted in Maryland
- The key to bringing Maryland into compliance with new ozone and fine particulate standards by 2010
- Significantly reduces mercury emissions and nitrogen deposition to the Chesapeake Bay
- Complements, but strengthens federal power plant rules







#### **Summary of HAA Requirements**

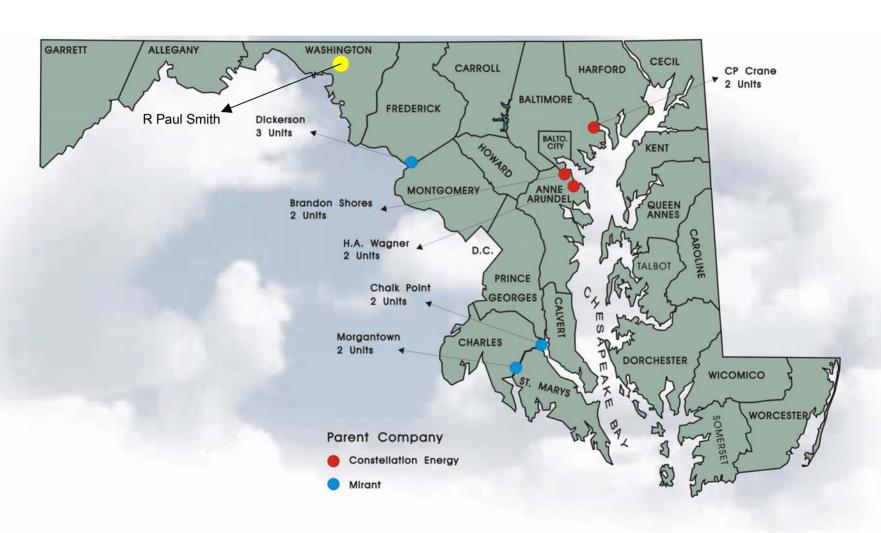
- Requires Maryland's coal-fired power plants to
  - Reduce emissions to meet "caps" for nitrogen oxide (NOx) and Sulfur dioxide (SO2) emissions
    - Pollutants that contribute to ozone, fine particle and Chesapeake Bay pollution
    - Caps can be met at each plant or across a companies "system"
  - Reduces mercury emissions significantly at each plant
- Requires reductions in Maryland
  - Affected sources cannot meet
     Maryland requirements by buying
     out-of-state emission allowances







# Coal Fired Power Plants Covered by the Healthy Air Act

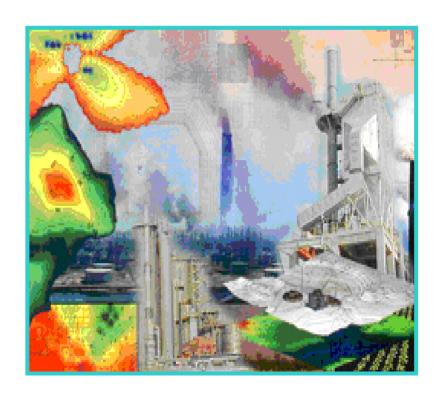




## **HAA Emission Reductions**

#### Nitrogen oxide emissions

- 70% reduction by 2009
- 75% reduction by 2012
- When added to earlier control efforts – Over 85 % reduction since 1990
- Critical to Maryland's plan to meeting the ozone standard by 2009/2010
- Also contributes to fine particulate nonattainment
- Significant benefit to the Chesapeake Bay







## **HAA Emission Reductions**

- Sulfur dioxide (SO2) emissions
  - 80% reduction by 2010
  - 85% reduction by 2013
  - Absolutely critical to Maryland's plan for meeting the fine particulate standard by 2010
    - Sulfates are the largest contributor to fine particulate air pollution in Maryland
  - Will also help improve visibility and help Maryland meet "Regional Haze" requirements







## **HAA Emission Reductions**

- Mercury emissions
  - 80% reduction by 2010
  - 90% reduction by 2013
  - First phase to be driven primarily by co-benefits from NOx and SO2 controls
  - Second phase most likely to drive other controls like activated carbon injection systems







## Comparing CAIR and the HAA

- Federal "Clean Air Interstate Rule"
  - Projected to achieve reductions at Maryland plants similar to the HAA
- NOx
  - HAA = 70% by 2009
  - CAIR = 82% by 2010\*
- SO2
  - HAA = 80% by 2010
  - CAIR = 79% by 2010\*
- Major difference?
  - \* CAIR is a regional "cap-and-trade" program and does not guarantee reductions within Maryland
  - HAA guarantees reductions in MD

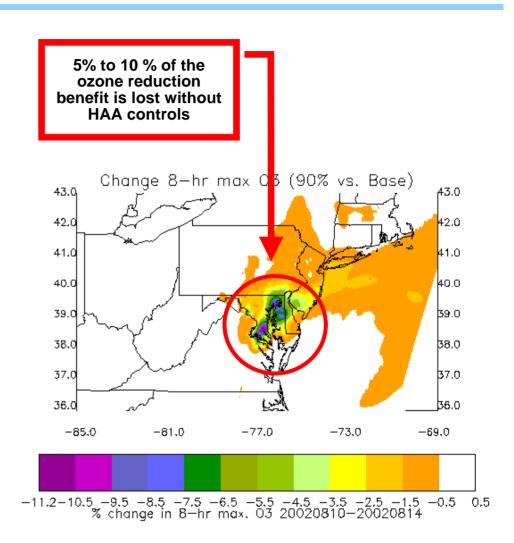






#### Why Do We Need "In-State" Reductions?

- Preliminary photochemical modeling analysis indicates that Maryland will attain the fine particulate standard and come very close to the new ozone standard with stringent power plant rules like the HAA
- Reductions from upwind power plants are also critical
  - The 70% argument
- Without the reductions from the Healthy Air Act ...
  - Maryland will not be able to comply







# Are Companies Outside of Maryland Taking Similar Action?

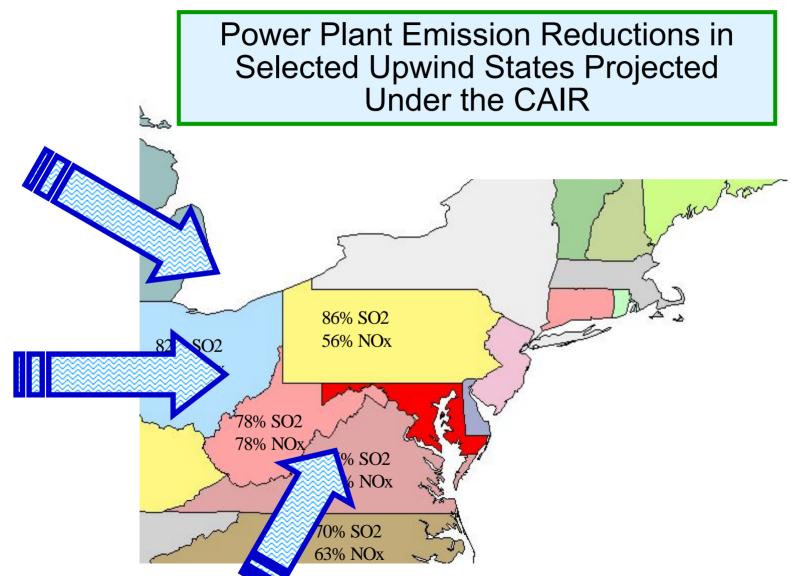
- Constellation Energy Group and the Mirant Corporation have announced plans to add significant new NOx, SO2 and mercury controls to comply with the HAA
  - Several Billion \$\$
- Dominion Power air pollution controls to exceed 2 Billion \$\$
- AEP has announced a staged program for installing air pollution controls that will exceed 5 Billion \$\$ upon completion
- Similar investments at other companies







#### **Emission Reductions in Other States**







#### What Else Does the HAA Require?

- The HAA also requires
   Maryland to become a full
   participant of RGGI (the
   Regional Greenhouse
   Gas Initiative) by June of
   2007.
  - Currently 7 states
  - Maryland has already been a formal observer in the RGGI process
  - Designed to begin to address global warming/climate change
  - Requires a CO2 "cap and trade" program







#### Current RGGI Activities in Maryland

- MDE has been an active participant in all of the RGGI work
  - Model Rule, Leakage, "Maryland on-ramp", etc.
  - Stakeholder meeting on model rule and leakage issues in November
- Phase 1 of a legislatively required study by January of 2007
  - Academic team (coordinated by U of M) www.cier.umd.edu/RGGI
  - Looking at costs and reliability
  - Will help Maryland understand key issues
- Resources continue to be an issue









## Questions?





# **Air Quality Action Days**

What You Need to Know

## **Brief History of Air Pollution**

- Early legislation King Edward I (1306)
- Industrial Revolution (16<sup>th</sup> & 17<sup>th</sup> centuries)
- Los Angeles, CA and Donora PA (late 1940's), London Fog (1953)
- Air Pollution Control Act of 1955
- Clean Air Act (1963, 1970, 1990)



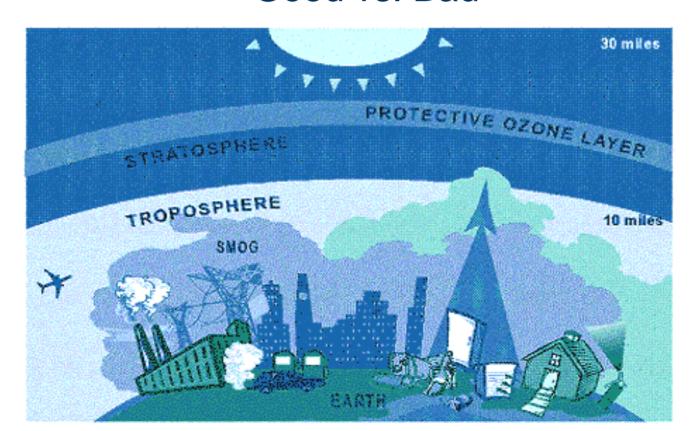
Donora, PA at Noon on October 29, 1948

# Air Quality Basics

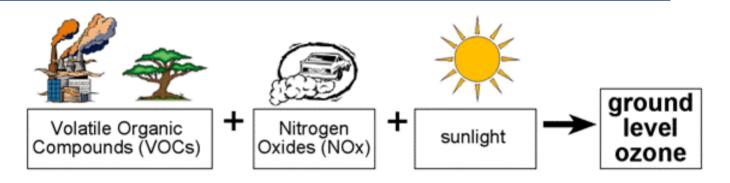
- Not just a 'metropolitan' issue
- Peak pollution months are May through September
- We are all susceptible to the effects of air pollution
- Two major pollutants for our area: Ozone and Fine Particulates (PM 2.5)

## **Ozone Facts**

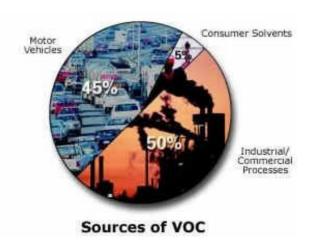
Good vs. Bad

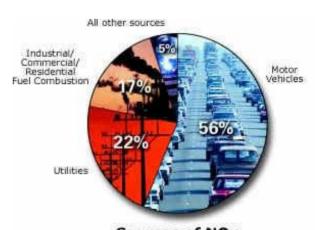


## **Ozone formation**



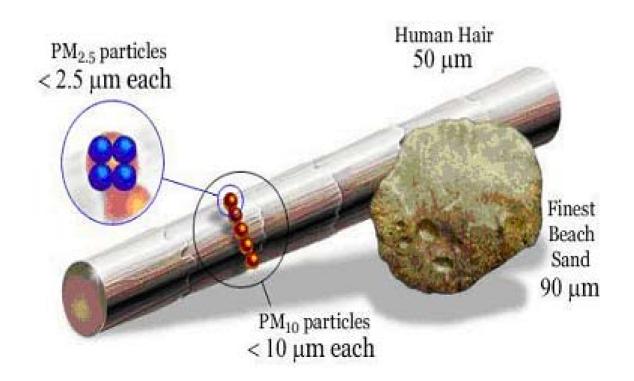
No direct source of ozone – combination of VOC's and NOx.





Sources of NOx

## Fine Particulate Matter (PM 2.5)



## Fine Particulate Matter (PM 2.5)

- Made up of both solid and liquid matter.
- Have direct and indirect sources
- Can remain suspended in the air and travel great distances
- Pollution can occur year round
- Particles less than 10 micrometers are easily inhaled and can accumulate in the respiratory system
- Can have an impact on public welfare such as visibility, property damage, and crop damage.

#### **Health Effects of Air Pollution**

- Both forms of pollution contribute to heart and lung disease when subjected to prolonged exposure.
- Ozone more acutely affects those with existing lung problems such as asthma.
- Particulate matter also affects those with lung problems but has also been linked to heart problems.

# The Air Quality Index



Pollutant: Particles
Today's Forecast: 190

Quality: Unhealthy for Sensitive Groups

People with heart or lung disease, older adults, and children are at risk.

#### Air Quality Index (AQI): Ozone

index Values	Levels of Health Concern	Cautionary Statements
0 - 50	Good	None
51 - 100*	Moderate	Unusually sensitive people should consider reducing prolonged or heavy exertion outdoors.
101 - 150	Unhealthy for Sensitive Groups	Active children and adults, and people with lung disease, such as asthma, should reduce prolonged or heavy exertion outdoors.
151 - 200	Unhealthy	Active children and adults, and people with lung disease, such as asthma, should avoid prolonged or heavy exertion outdoors. Everyone else, especially children, should reduce prolonged or heavy exertion outdoors.
201 - 300	Very Unhealthy	Active children and adults, and people with lung disease, such as asthma, should avoid all outdoor exertion. Everyone else, especially children, should avoid prolonged or heavy exertion outdoors.
301 - 500	Hazardous	Everyone should avoid all physical activity outdoors.

## Code Green

Good; Air Quality is considered good and no air pollution poses little or no risk.

- ENJOY THE OUTDOORS !!!!!!
- Keep engines tuned.
- Use environmentally friendly products.
- Carpool or use transit where possible.

## Code Yellow

Moderate; Air quality may pose a moderate risk, especially for those who are sensitive to air pollution.

- Limit driving, consolidate trips.
- Reduce car idling
- Conserve electricity choose ENERGY STAR appliance and lighting, set air conditioners to 78 degrees.
- Carpool or use transit where possible.

# Code Orange

Unhealthy for sensitive groups; Children and adults with respiratory and heart ailments should limit time spent outside.

- Refuel vehicles after dark.
- Avoid using aerosol products.
- Postpone lawn mowing and use of other gasoline powered engines.
- Limit driving by consolidating trips
- Carpool or use transit where possible.

## Code Red

Unhealthy Air Day; Everyone may experience more serious health effects and should limit their outdoor activity.

- Avoid lawn mowing and use of other 2 cycle engines such as chainsaws and weed eaters, or use electric power machines.
- Put off painting until Air Quality improves.
- Refuel vehicles after dark.
- Avoid using aerosol products.
- Carpool or use public transit.

# Code Purple

Very unhealthy; Everyone should avoid outdoor activities, especially individuals with heart and breathing ailments, children, and older adults.

- Avoid outdoor physical activities
- Avoid mowing the lawn or using any other gasoline powered engines.
- Refuel vehicles after dark.
- Carpool or use public transit.
- Avoid painting or use of aerosol products.

## Links and Resources

US EPA – www.airnow.gov; www.epa.gov/oar

MD Dept. of the Environment – www.mde.state.md.us/air

Clean Air Partners – <u>www.cleanairpartners.net</u>

Real-time air quality notification – <u>www.air-watch.net</u>

American Lung Association – <u>www.lungusa.org</u>

American Heart Association – <u>www.americanheart.org</u>

Washington County – <a href="www.washco-md.net/air\_qual.shtm">www.washco-md.net/air\_qual.shtm</a>



## FUEL & VEHICLE TASK COMMITTEE



Board of County Commissioners, Washington County, Maryland

March 2006

## Background

2005 fuel prices and short supply drove meetings and discussions re County's short/long term ability to function in fuel crisis

Initial consensus was short term survival is possible (4 months) but County needed to explore long term fuel use conservation alternatives

Task Team formed

## TASK GROUP MEMBERS:

Kevin Cerrone (Chairman)

Rocky Bishop

Brenda Lampard

John Latimer

**Becky Maginnis** 

Eric Deike (City of Hagerstown)

Jack Reynard

Mark Faith

**Rob Smith** 

Rodney Unger

Jill Baker

Ray Foltz (City of Hagerstown)



## DISCUSSION AND FINDINGS:

FUEL - ACCESS, AVAILABILITY, ALTERNATE FUEL TYPES:

Consider a plan to network existing fuel sites

Possible for entire system with software and equipment upgrades

Partially achievable now at no cost but only at Highways locations

Consider a plan to purchase fuel outside the network of County sites during emergencies

Lack of accessible programs; lack of accountability

## ...continued

Use bio-diesel and ethanol to reduce consumption of diesel and/or gas

Lack of local suppliers

Would require vehicle maintenance rework

Implement use of waste oil in lieu of regular fuels for standby generator systems

Generators are vital to County operations and fuel sources are not reliable

Consider increasing fuel storage capacity

Large capital investment

Consider legislative priority for fuel deliveries in a crisis

#### ....continued.....

#### **VEHICLE USE, TYPE AND MAINTENANCE:**

Purchase full hybrid vehicles and consider alternative fuel vehicles

Test vehicles to be purchased by Sheriff's office

Review vehicle replacement guidelines

In process to extend replacement from 5 or 7 yrs to 10

Review vehicle use and take home policies and assignments and imposition of mileage limits

If Commissioners approve, form subcommittee

Cost projections show little impact on take home vehicle costs

# ...continued...

- Implement teleconferencing (Webinars, etc.)
- Little impact, but may be useful in the future as technology improves

File time cards electronically

Not available in PeopleSoft until 2013 upgrade

Consider alternative payroll distribution and mail delivery

Miminal impact since departments already maximize use of time involved

Implement policies for restrictions of speed limits and engine idle time limits

Can be mandated at no cost immediately

# ...finally...

Consider alternative employee work schedules

Presently implemented at Highways and Parks; under discussion at Permits

Ensure optimum vehicle fuel efficiency through scheduled preventive maintenance

Can be implemented immediately at minimal cost and mandated through Vehicle Use policy

Consider vehicle size vs. intended use

Already implemented as part of budget approval process

Consider use of County Commuter bus transportation

Useful in national emergencies or in county-wide disaster planning

### APPENDIX - F

To: Department Heads

From: Rod Shoop

Date: September 8, 2006

Re: Fuel & Vehicle Task Group

Critical Tasks

As many of you know, on July 18, 2006, the Fuel & Vehicle Task Group presented their findings to the Commissioners. With that presentation, the original Task Force completed its mandate.

At my request, and in accordance with the Commission's directive to move forward with the recommendations, a prioritized task list was developed based on those recommendations, the most important of which are listed below:

#	Task	Estimated Time Frame	Suggested Department Participants
1	Revisions to Vehicle Replacement Guidelines to increase years of economic life of Class 1 & 2 vehicles from 5 to 10 years or from 90,000 to 100,000 miles  Develop cost analysis and strategy to phase in use of hybrid/alternate fuel vehicles with particular emphasis on maintenance, replacement and return on investment	60-90 days	Highways, Water Quality, Patrol, Budget & Finance, Permits & Inspections
2	Develop a policy and implement a process that standardizes County-wide preventive maintenance oversight for consistency and to maximize life and reliability of County vehicles	120+ days	Highways, Water Quality, Buildings, Grounds & Parks, Patrol, Public Transportation, Solid Waste, Airport
3	Expand policy PR-25 "Use of Official Cars and Equipment" to add sections for eligible drivers, safe driving and equipment use; review cost efficiency of take home policy and mileage limits  Distribute fuel efficiency tips to all employees and post in County-owned vehicles	120 days – Draft Policy 180 days – Policy Adoption	Human Resources, Budget & Finance, Permits, Water Quality, Highways, Patrol, Permits & Inspections

I have asked Kevin Cerrone, with the assistance of Jack Reynard and Becky Maginnis, to continue to lead the Fuel & Vehicle Task Group through this next phase. Since the most critical tasks will involve policy reviews and recommendations that will impact all County departments, I am asking each department head to recommend a member to participate in these policy reviews.

Please advise Kevin Cerrone by September 22, 2006 of the identity of the person from your department that you will be assigning to these committees. I understand from Kevin that it is his intention to complete these projects as quickly as possible so as to impact the workload of the participants as little as possible.

Your cooperation is greatly appreciated and will allow representation of each of your departments in these important issues.

### APPENDIX - G



## 2006 Clean Air Partners Program Recap

#### Situation

Each year in the Metropolitan Washington-Baltimore region, cars and trucks travel more than 38 billion miles on the roads and account for 30-40 percent of the ozone-causing pollutants that impact public health. Activities such as painting, operating gas-powered lawn equipment and cleaning with household chemicals can also contribute significantly to poor air quality. In fact, mowing the lawn for one hour with a gas-powered lawn-mower is equivalent to driving round trip from Washington, D.C. to New York City. In response to this health threat, Clean Air Partners (CAP), a non-profit, pubic-private partnership committed to improving air quality in the Metropolitan Washington-Baltimore region, solicited PRR's help. Clean Air Partners contracted PRR to develop an outreach strategy that would both educate the public on the health threats surrounding Code Orange air quality days and encourage businesses, organizations, and individuals to reduce air pollution through simple, voluntary actions.

#### **Action Plan**

In order to raise public awareness around the health affects of Code Orange air quality and continue to position Clean Air Partners as the leading authority on local air quality issues, PRR employed a comprehensive strategy that incorporated marketing, media relations. research and graphic design. PRR's marketing team developed radio advertisements, utilized targeted radio advertising, secured crosspromotional opportunities and negotiated value-adding sponsorships on Clean Air Partner's behalf. PRR's graphic design team developed ads and transit cards for WMATA as well as a series of ready-to-use web materials for local meteorologists to post as online news alerts and during weather forecasts. PRR also secured meetings with meteorologists in the Metropolitan Washington-Baltimore region to explore future partnerships opportunities with Clean Air Partner's for educating their viewers about local air quality and action steps to take on poor air quality days. To garner further attention for this program, PRR's media relations team executed two media events. Both events featured professional emissions testers who demonstrated the amount of pollution that is generated from common sources including cars and gas-powered lawn-care equipment. To supplement these events, the media relations team developed stories with relevant angles and timely messaging to pitch to media.

#### **Program Materials:**

Logos were included in following materials Clean Air Partner's Campaign Materials:

 A new Air Quality Action Day Brochure - handed out to area meteorologists, at local radio stations remotes, at Baltimore, DC & Northern Virginia partner events.

Value .....\$ 3,5000

#### Radio Schedule:

Clean Air Partners to create two new radio spots and a comprehensive radio advertising campaign targeting the Baltimore and DC markets during the summer months. The new spots were humorous in tone and carried the message of the health effects of "Code Orange" and "Code Red Days". They promoted carpooling transit and other steps from the Air Quality action guide to improve your health and air quality.

The radio buy was leveraged for a tremendous amount of value-added that featured creative prizes and giveaways, on-air mentions of Top Ten air quality action steps, and contests such as "Funniest Carpooling Story" designed to encourage alternative commuting, "Fill-up After Dark" promotions at local gas stations and a "Ozone Action Days Magnet" that was produced at no charge to Clean Air Partners. The entire radio buy was leveraged to well over \$400,000. Your name was mentioned as a part of the radio tag.

Overall Radio Value.....\$ 408, 560

#### **Transit Boards:**

Clean Air Partners joined with WMATA to produce and post transit boards throughout the DC area. The schedule resulted in the two-month display of 500 interior bus cards, dioramas, posters and interior rail cards that promoted both bus transit on bad air days.

Value......\$ 57,000

#### **Media Relations:**

PRR's media relations team executed two media events. The first event was held in Washington DC and featured members of EPA and NOAA kicking off National Air Quality Awareness Week. The second media event was editorial, less formal "photo opportunity" for interested media and coordinated it at the home of a Baltimore family with asthma. PRR highlighted the extra precautions the family takes on Code Orange and Code Red days. Both events featured professional emissions testers demonstrating the amount of pollution that is generated from common sources including cars and gas-powered lawn-care equipment. To supplement these events, the media relations team developed stories with relevant angles and timely messaging to pitch to media.

USA Today, Washington Post, Baltimore Examiner and several local TV and radio stations including News Channel 8, WAMU-FM, WTOP-FM and WMAL-AM covered Clean Air Partners specifically as well as Code Red related stories.

Through this outreach Code Red as well as Clean Air Partners was highlight to approximately **8**, **577**,**779 people**!

Value	\$ 273,000
Campaign Value:	
Campaign Collateral	\$ 3,500
Radio Buy	\$ 408,560
TV PSA	\$ 57,000
Media Coverage	\$ 273,000
TOTAL VALUE	\$ 742,060



# 2006 Air Quality Action Season Partnership Opportunities for Baltimore and Washington DC Businesses and Organizations

#### **Background/Overview**

Clean Air Partners is a volunteer nonprofit consortium of governments, businesses, organizations and individuals working to improve the health of individuals and the environment of the Washington and Baltimore metropolitan regions by reducing ground-level ozone and particle pollution. We work to educate employers, businesses and the public to take voluntary actions that reduce air pollution, specifically on days when the air quality is especially poor (usually late Spring or Summer).. Clean Air Partners provides resources and information to a network of participants and assists employers and businesses in establishing on-site programs designed to reduce the impact their actions can have on bad air days. Over 700 employers, businesses and individuals are registered as Clean Air Partners and have committed to take voluntary actions on days with poor air quality

Clean Air Partners needs the support of regional businesses, organizations and associations to take the message to the masses.

Especially hard hit by these unhealthy conditions are the elderly, children and people with existing pulmonary conditions such as asthma. The World Health Organization reports three million people now die each year from the effects of air pollution. This is three times the one million who die each year in auto accidents.

**Clean Air Partners' provides the Air Quality Action Guide provides** color-coded action steps that one takes to protect the air and your health during the specific color code. They include:

- Limit outdoor activities
- Limit driving make one trip
- Use public transportation
- Defer mowing lawns with gasoline-powered mowers
- Refrain from using solvent based consumer products and oil based paints.

Clean Air Partners work year round to educate the public about what they can do to help improve the quality of the air. Although, these messages are noteworthy every day of the year, it is vitally important that they be heard during the months of **June**, **July and August**. These months have the highest number Code Red & Code Orange days. Therefore, it is imperative that individuals and businesses are informed about the voluntary actions they can take to improve air quality.



Supporting the marketing efforts of the Clean Air Partners, allows your business or organization the opportunity to make a tangible difference in the everyday lives of people living and working in the community.

The 2006 Clean Air Partners campaign will feature:

- Over \$300,000 in radio messages on 5 or more top stations in the Washington, D.C. and Baltimore markets. Two (2):30 spots run adjacently.
- Over \$100,000 worth of TV spots (:60) aired by Comcast on its systems in the Washington, D.C. and Baltimore markets. The spots will be seen on a variety of channels including, but not limited to: CNN, ESPN, Fox News, History Channel, BET, BRAVO, and Lifetime.
- Over 10,000 "Clean Air Action" season brochures and flyers distributed to businesses in the Washington, D.C. and Baltimore markets.
- Dedicated messaging on the <u>www.cleanairpartners.net</u> website.
- Air Quality Index Magnets that are passed out at events through out the Baltimore and DC region.

Company/Org has the opportunity to support the Clean Air Partners 2006 AQAD program via one of the following marketing partnerships.



#### **Clean Air Partners** Radio Campaign Recap October 2006

**2006 RECAP** 

Stations:

8

Weeks on Air:

Spots/PSA/Mentions:

5

1892

1,519.2 (12,540,137 impressions)

25-54 GRPs\*: 35-64 GRPs\*:

1,749.2 (27,924,309 impressions)

Adults 18+ GRPs\*:

1,477.1 (42,107,948 impressions)

Total Gross Impressions

with promotions Adults 18+: 48,852,243 impressions

**Total Package Value:** 

\$408,560 (leveraged 229%)

**Total Cost:** 

\$124,015net

\*Based on aired spots. See Calendar for impressions including added value.

South the south and the south Net Cost \$14,344 \$17,680 \$11,050 \$8,606 \$14,344 \$17,680 \$11,050 \$8,606 Gross Cost \$16,875 \$13,000 \$10,125 \$20,800 n/c n/c **\$13,000** \$10,125 \$16,875 \$20,800 2 2 2 2 2 2 2 5 5 2 2 Total Value \$1,500 \$15,640 \$43,300 \$10,500 \$10,050 \$12,150 \$10,650 \$28,425 \$13,200 \$1,200 \$37,400 \$1,500 \$15,000 \$24,960 \$1,500 \$20,419 \$2,625 \$500 \$750 Impressions Adulls 18+ 1,000 2,916,486 2,816,660 2,695,946 1,629,308 2,104,700 1,094,444 3,312,552 6,808,134 631,070 778,739 576,096 3,000 3,000 **6,423,961** 3,362,908 7,500 3,000 Total Spots <u>+ 8</u> 95 142 55 \$ 52 FE 92 16 81 용 8 <del>5</del> <del>2</del> 321 첧 subtotal w/o 9/4 . 30 Lite Break morning show subtotal subtotal 874 August 01.15 동 Creation and distribution of Air Quality Action Guide Magnets Distribution of CAP literature at station events thru August 133 18 S Light Rail Season Pass Contest 11 8 4 724 28 18 + + ening Fill-up. Party ા0 July 41/ Commuter Appreciation Day æ 7/10 5 ..... 82 28 83 10 0 23 **8**2 % 98 38 Lite Break morning show sponsor Game Day Contest ĸ. 20 15 June 6/26 Paid Spots Bonus/PSA Bonus/PSA Bonus/PSA Bonus/PSA Paid Spots Paid Spots Paid Spots Promotion Promotion Promotion Promotion Online Other: Online Online Other Battimore Totals News/Talk/Sports Adult Contemp. Adult Hits 101.9 FM Urban AC 1090 AM 102.7 FM 95.9 FM 2006 CLEAN AIR PARTNERS Radio RECAP CALENDAR 47 # 9# **¥** Rank W25-54: Rank W25-54: Rank W25-54: Rank W25-54: BALTIMORE WBAL-AM Format: Format: Fоrmat: WQSR-FM WWIN-FM WLF-FM

		t Net Cost	\$14,025					\$14,025	\$13,940				070	\$13,940	\$22,270				\$22,270	\$22,100						\$22,100	
		Gross Cost	\$16,500	2	2/2		υζc	\$16,500	\$16,400	n/c	2/2	2/2	900	\$16,400	\$26,200	2	9/2	ş	\$26,200	\$26,000	n/c	υ/c	·	2 2	2	\$26,000	
		Total Value	\$19,800	\$5,400	\$30,571		contest	\$55,771	\$19,680	\$11,200	\$12,925	\$2,000	oon'oe	\$45,805	\$31,440	\$9,600	\$31,200	\$1,500	\$73,740	\$31,200	\$27,000	\$10,800	1000	\$2 000	\$3,000	\$74,000	
		Impressions Adults 18+	1,448,598	914,904	1,118,216		3,500	3,485,218	1,308,416	1,101,824	1,308,416	3,000		3,721,656	4,161,100	1,556,900	7,688,700	15,000	13,421,700	2,915,908	3,216,075	1,286,430	9	03.370	207,000	7,649,783	
		Total Spots	25	98	4			138	9/	2	76		- !	217	88	25	525	<del>-</del>	378	89	75	8 %	٠.		- <del>-</del>	176	
ust	814							subtotal	!		30 Lighte Out WA & Days Koz Silow			subtotal			10 "Clet School Treffic Jens"		subtotal							subtotal	•
August	847					-			0.00	Ľ											í						
, qu	7/31							·								. 9							·				
1	7/24		6	o.							26 Lights Out WA		を変える			9	Metro Stations Promos	Stone Soul Picnic brochure									_
ylub	7//7			.12		v 3				16							42 Health Tipe Scorsoralup	18. <b>18.</b> 18. 18. 18. 18. 18. 18. 18. 18. 18. 18.		4	3,						_
	7/10		37. 749			Confeet			61	The state of the s	11 Dream Set				88	2	8.30 and Over Gas Promo										
	7/3		10	12		Contract				16						W. 11	15ath Tipa Soorsorship			21	8		Lawmower glyeaway				
June	92/9								1.0	19	10 Trivia contest	e S			28		ł			17.00	8	91	Lawmow				
			Paid	Bonus/PSA	Promotion		Online		Paid	Bonus/PSA	Promotion	Online			Paid	Bonus/PSA	Promotion	Other		Paid	Bonus/PSA	Promotion	:				
RTNERS			97.1 FM	Adult Contemp	. 44				105.9 FM	Jazz					102.3 FM	Urban	#5			103.5 FM/	1500AM/107.7FM News	9#					
2006 CLEAN AIR PARTNERS Radio RECAP CALENDAR	adio ilecari che	WASHINGTON D.C.	WASH-FM	Format:	25-54:				W.IZW-FM	Format:	25-54:				WMMJ-FM	Format:	Rank W25-54:			WTOP-AM	Format	Rank W25-54:					



### **Clean Air Partners Baltimore Radio Campaign Recap**

October 2006

**BALTIMORE RECAP** 

Stations:

4

**Total Weeks on Air:** 

5

Spots/PSA/Mentions:

989

Women 25-54 GRPs\*: Adults 35-64 GRPs\*:

742 (4,452,514 impressions) 899 (9,887,006 impressions)

Adults 18+ GRPs\*:

749.8 (15,200,778 impressions)

**Total Gross Impressions** 

with promotions Adults 18+: 20,573,886 impressions

**Total Package Value:** 

\$159,244 (leveraged 208%)

**Total Cost:** 

\$51,680net

\*Based on aired spots. See attached calendar for impressions including all added value.

WBAL-AM

1090

Format:

News/Talk/Orioles Baseball

Ranked Women 25-54: #7 Total Weeks on Air:

Spots:

92 paid 16 bonus/PSA

81 promotional announcements

Schedule Efficiency

Based on aired spots, see attached calendar for impressions including all added

value.

Women 25-54:

87.4 GRPs

40,979 (6.9%) reach, 13.3 frequency

545,022 impressions

Adults 35-64:

267.5 GRPs

159,329 (14.5%) reach, 18.5 frequency

2,947,586 impressions

Adults 18+:

267.9 GRPs

278,469 (13.9%) reach, 19.3 frequency

5,374,451 impressions

#### Added Value:

On-Air:

1. Light Rail Pass online contest. Station gave away pair of Light Rail passes good thru the remaining of the Orioles Baseball Season. 81 promotional announcements over two weeks aired during Orioles Baseball broadcasts.

#### Website:

2. Logo on contest page.

Package Value:

\$43,300

Cost:

\$17,680net

**WLIF-FM** 

101.9

Format:

**Adult Contemporary** 

Ranked Women 25-54: #4 Weeks on air:

Spots:

45 paid

140 bonus/PSA

134 promotional announcements

#### Schedule Efficiency

Based on paid spots, see attached calendar for impressions including all added value.

Women 25-54\*:

**167 GRPs** 

94,394 (15.9%) reach, 10.7 frequency

1,010,016 impressions

Adults 35-64\*:

162.5 GRPs

160,746 (14.6%) reach, 11 frequency

1,756,095 impressions

Adults 18+\*:

**133 GRPs** 

261,157 (13%) reach, 10.4 frequency

**2,716,033** impressions

#### Added Value

On-Air:

- 1. Clean Air Commuter Appreciation Day, 2-hour afternoon on-site promotion at local light rail stop. Station gave away prizes and distributed Clean Air Partners brochures/information. 24 live mentions week prior to promotion.
- 2. Lite Break Sponsor Clean Air Partners sponsored the morning show's visit to an office with breakfast. Station to distributed Clean Air Partners literature, and provided 5 10-second promotional spots and 10 live mentions.

#### Website:

- 3. Color Code Promotion: logo and hyperlink on home page and partners' page. Station provided 10 weekly on-air promotional announcements throughout campaign directing listeners to the website for more information.
- 4. Top Ten List, station listed Clean Air Partners top 10 dangers of being exposed to and how to fight against Code Red and Code Orange Days.

Package value:

\$37,400

Cost:

\$11.050net

**WQSR-FM** 

102.7

Format:

Adult Hits (JACK)

Ranked W25-54: Weeks on air:

#6

Chata

5

Spots:

95 paid

142 bonus/PSA

55 promotional announcements

#### Schedule Efficiency

Based on aired spots, see attached calendar for impressions including all added value

Women 25-54:

205.7 GRPs

77,148 (13%) reach, 16 frequency

1,234,376 impressions

Adults 35-64:

196.1 GRPs

123,550 (11.2%) reach, 17.5 frequency

2,162,125 impressions

Adults 18+:

149.6 GRPs

185,355 (9.2%) reach, 16.9 frequency

3,132,494 impressions

#### Added Value

#### On-Air:

- "Evening Fill-up Party", 2 hour station appearance. Station provided free gas, prizes and distributed Clean Air Partners literature to listeners. A minimum of 15 on-air promotional announcements aired the week leading up to the event.
- 2. 5 60-second PSA per week.
- 40 15-second promotional announcements drove traffic to the website logo.

#### Website:

4. Logo and link on homepage June 26 thru August.

#### Other:

5. Distribution of Clean Air Partners literature at all station events, June 26 thru August.

Package value:

\$28,425

Cost:

\$8,606net

**WWIN-FM** 

95.9

Format:

Urban AC

Ranked Women 25-54: #2 Weeks on air: 5

5

Spots:

100 paid

52 bonus/PSA

37 promotional announcements

#### Schedule Efficiency

Based on aired spots, see attached calendar for impressions including all added value.

Women 25-54:

281.9 GRPs

98,400 (16.6%) reach, 16.9 frequency

1,663,100 impressions

Adults 35-64:

272.9 GRPs

154,100 (14%) reach, 19.6 frequency

3,021,200 impressions

Adults 18+:

199.3 GRPs

241,000(12.0%) reach, 16.5 frequency

3,977,800 impressions

#### Added Value

On-Air:

1. Code Orange PSA's on Code Orange Days. Minimum of 3 30-second pre-recorded spots aired on Code Orange Days. Station wrote and produced spots.

 Clean Air Partners Game Day Contest, station gave away daily passes on the MTA, one grand prize of 4 pack tickets to Orioles baseball night game and 4 passes on the Light Rail train. Station provided 10 30second spots, 10 10-second mentions, Orioles tickets and MTA passes.

3. It's Electric! Station hosted contest and gave away 2 electric lawnmowers at local Home Depot store. Station to provided 10 30-second promotional spots, 10 10-second mentions, 2 electric lawnmowers and additional prizes (i.e. CD's, station merchandise, etc). Station distributed Clean Air Partner magnets and brochures.

4. "Code Days" Magnet. Station created and produced 500 magnets referencing the various air quality codes, aired 60-10 second prerecorded announcements to promote magnets. Station distributed Clean Air Action Days brochures during van runs, events and appearances. Station produced all spot.

Package value:

\$50,119

Cost:

\$14,344net



### **Clean Air Partners DC Radio Campaign Recap**

October 2006

DC RECAP

Stations:

Weeks on Air:

Spots/PSA/Mentions:

Women 25-54 GRPs\*:

Adults 35-64 GRPs\*:

Adults 18+ GRPs\*:

4

816

850.2 (18,037,303 impressions) 727.3 (26,907,170 impressions)

\$249,316 (leveraged 245%)

777.2 (8,087,623 impressions)

**Total Gross Impressions** 

w/all added value Adults 18+: 28,278,357 impressions

**Total Package Value: Total Cost:** 

\$72,335net

\* Based on aired spots, see attached calendar for impressions including all added value.

WASH-FM

97.1

Format:

Adult Contemporary

Ranked Women 25-54: #4 Weeks on air:

Spots:

57 paid

36 bonus/PSA

44 promotional announcements

#### Schedule Efficiency

Based on paid ad schedule only, see attached calendar for added value impressions.

Women 25-54:

90.6 GRPs

162,810 (13.9%) reach, 6.3 frequency

1,025,707 impressions

Adults 35-64:

78.6 GRPs

246,858 (11.7%) reach, 6.7 frequency

1,653,950 impressions

Adults 18+:

63.3 GRPs

375,161 (10.1%) reach, 6.3 frequency

2,363,520 impressions

#### Added Value

On-Air:

- 1. Carpool Shout Out Contest, listeners registered online to win dinners for carpooling. Station provided 10 promotional announcements per week, 1 on-air live call out to winner and all dinner prizes.
- 2. 12, 60-second recorded PSAs per week
- 3. Metro Pass giveaways thru on-air, online and appearance contests. Giveaways promoted thru on-air mentions.

Website:

4. Banner on website with link to dedicated registration page.

Package value:

\$55.771 \$14,025net

Cost:

**WJZW-FM** 

105.9

Format:

Jazz

Ranked Women 25-54: #8

Weeks on air:

Spots:

76 paid

64 bonus/PSA

76 promotional announcements

Schedule Efficiency

Based on aired spots, see attached calendar for added value impressions

Women 25-54:

110.8 GRPs

106,199 (9.1%) reach, 12.2 frequency

1,295,628 impressions

Adults 35-64:

141.6 GRPs

230,164 (10.9%) reach, 13.1 frequency

3,015,153 impressions

Adults 18+:

108.4 GRPs

316,076 (8.5%) reach, 12.6 frequency

3,718,550 impressions

#### Added Value

On-Air:

- 1. Trivia Question of the Day, call in trivia contest during morning show. Station provided 2 live mentions per day, Monday-Friday, 6a-7a. Station provided all prizes.
- 2. The Dream Set, weekly sponsorship of listeners favorite artists hour. Station to provided 11 promotional mentions per week.
- 3. Lights Out Washington, sponsorship of nightly Monday-Friday program. Station provided 25 promotional mentions.
- 4. Dave Koz Show sponsorship. Station provided 5 promotional mentions. Website:
  - 5. Air Quality Color Code notification listed next to weather on homepage including client logo and link to website, June 26-July 31.

Package value:

\$45,805

Cost:

\$13,940net

WMMJ-FM

102.3

Format:

Urban

Ranked Women 25-54: #2 Weeks on air:

Spots:

88 paid

64 bonus/PSA

225 promotional announcements

#### Schedule Efficiency

Based on aired spots, see attached calendar for added value impressions.

Women 25-54:

**427 GRPs** 

168,600 (14.4%) reach, 29.7 frequency

5,010,800 impressions

Adults 35-64:

471.2 GRPs

289,900 (13.7%) reach, 34.7 frequency

10,038,800 impressions

Adults 18+:

355.6 GRPs

419,600 (11.3%) reach, 32 frequency

13,406,700 impressions

#### Added Value

#### On-Air:

 Air Quality PSAs. Station produced 30-second and 60-second PSAs to promote key messages, airing up to 5x per week.

- Metro Station Appearances. 2-1 hour appearances at Metro stations giving away \$5-\$10 Metro cards to first 102 people, and other stations prizes. Station provided 15 10-second, 1 15-second top of the hour call in and 1 60-second call in for each event.
- 3. Health Tips Sponsorship. Two week daily sponsorship targeting women with newsworthy health tips. Station to provided 42 sponsorships with :10 tag line, per week airing Monday-Sunday.
- 4. Stone Soul Picnic On July 29, 2006, Station distributed Clean Air Partners brochures/information at event...
- 5. "30 & Over" Gas Promotion, 8p-10p. 2-hour station appearance at local gas station to encourage listeners to fill up their gas tanks after dark. First 102 listeners who have a "Majic 30 & Over Club Card" received \$20 worth of free gas. Station distributed brochures for Clean Air Partners at the appearance and provided a minimum of 4 live 60-second call ins & 4 live 30-second call ins from location. 15 10-second spots, 15 15-second spots and 15:60 second spot week leading up to the event.
- 6. Old School Traffic Jam, 5pm on-air sponsorship. Station provided 10 10second spots per week.

Package value:

\$73,740

Cost:

\$22,270net

WTOP-AM/FM

1500A/103.5 FM

Format:

News

Ranked Women 25-54: #6

Weeks on air:

Spots:

68 paid

75 bonus/PSA

30 promotional announcements

#### Schedule Efficiency

Based on aired spots, see attached calendar for added value impressions.

Women 25-54:

148.8 GRPs

306,200 (26%) reach,5.7 frequency

755,488 impressions

Adults 35-64:

158.8 GRPs

537,000 (25.4%) reach, 6.2 frequency

3,329,400 impressions

Adults 18+:

200 GRPs

1,124,000 (30.3%) reach, 6.6 frequency

7,418,400 impressions

#### Added Value

#### On-Air:

1. When in effect, Air Quality Codes Orange, Red or Purple was announced with all weather announcements throughout the campaign.

2. Station giveaway 2-electric lawnmowers thru on-line contests. Station provided a minimum of 15 on-air promotional mentions per week to encourage listeners to go online to enter. Client to provide 2-electric lawnmowers.

3. Station to produced and aired 15 30-second PSAs per week.

#### Website:

4. Air Quality Color Codes was listed on station's home page weather map throughout campaign.

5. Skyscraper on "weather" page of website (120x300 pixels) with link during June, July & August.

Package value:

\$74,000

Cost:

\$22,100net



# Clean Air Partners/Code Red Media Coveage Estimated Earned Media Values

Radio	(C) 经有金融额款 [2] 第二字的形式字子表	Date	Description		
			Description	Gross Impressions	Estimated Value
1	WTOP-AM (CBS)	5/21/06	3-minute news story aired between 3:00pm and 6:00pm.	44,400	\$7,350
2	WMAL-AM (ABC)	5/17/06	*3-minute 53-second news story aired between 10:00am and 10:30am.	24,000	\$8,153
3	WAMU-FM (NPR)	5/30/06	1-minute 30-second news story aired between 7:00am and 11:00am.	24,000	\$3,675
4	WTOP-AM (CBS)	8/1/06	3-minute 49-second news story aired between 7:00am and 8:00am.	70,300	\$10,682
5	WYPR-FM (NPR)	8/2/06	4-minute 16-second news story aired between 9:00am and 12:00pm.	20,000	\$7,464
6	Metro Networks	8/2/06	1-minute news story aired between 7:00am and 11:00am.	120,000	\$10,500
Radio		Date	Description	Gross Impressions	Estimated Value
1	WTOP-AM (CBS)	8/1/06	10-second news story at 8:39pm	70,500	\$492
2	MITOR AM (ODO)		·	. 0,000	<del>\$132</del>
4	WTOP-AM (CBS)	8/2/06	1-minute news story at 6:02am	70,000	\$2,800
Televisi	one.	Date	<b>Description</b>	Gross Impressions	Estimated Value
1	News Channel 8	5/17/06	3-minute 53-second news story aired during 10:00am news hour.	70,000	\$10,878
2	News Channel 8	7/18/06	3-minute 36-second news story aried during 10:00am news hour.	70,000	\$10,080
3	WBFF-TV (FOX)	7/27/06	4-minute 4-second news story aired during 7:00am news hour.	31,000	\$5,691
4	WJZ-TV (CBS)	7/27/06	1-minute 57-second news story aired during 5:00pm news hour.	25,000	\$3,413
Televisio	on	Date	Description	Gross Impressions	Estimated Value
1	WUSA-TV (CBS)	7/20/06	15 second news story aired at 9:48am	26,000	\$350
2	WRC-TV (NBC)	8/4/06	20-second news story aired between 6:00am and 11:00pm.	31,000	\$1,024
Newspap	ver	Dales .	Description	Grose Impression <b>s</b> ⊘	Estimated Value
1	The Baltimore Afro American	8/11/06	29 inch article with color photo.	88,000	\$5,426
2	Baltimore Examiner	8/21/06	20 inch article with color photo in Local section.	550,000	\$7,006

		•			
3	Baltimore Examiner	8/31/06	12 Inch article with color photo in Local section.	550,000	\$5,043
Newsp	paper	Date	Description	Gross Impressions	Estimated Value
· 1	The Baltimore Examiner	7/18/06	8 inch news article.	550,000	\$1,962
2	The Washington Post	7/18/06	22 inch news article.	1,593,332	\$59,752
3	The Connection Newspaper	7/19/06	12 inch article in editorial section.	324,878	\$492
4	The Gazette	7/19/06	22 inch news article.	177,588	\$1,775
5	The Washington Examiner	7/19/06	10 inch news article.	574,072	\$2,328
6	The Capital Newspaper	7/20/06	10 inch news article.	101,200	\$5,580
7	The Washington Post	7/20/06	20 inch news article.	1,593,332	\$54,320
8	Times Community Newspaper	7/25/06	10 inch news article.	55,000	\$350
Online		Date	Description	Gross Impressions	Estimated Valu
1	blogs.usatoday.com/weather/	5/18/06	Online article.	74,600	\$84
2	www.nbc4.com	7/16/06	Online article.	13,900	\$378
3	www.wjz.com	7/27/06	Online article.	3,700	\$95
4	www.wtopnews.com	8/2/06	Online article.	20,500	\$574
5	www.wypr.org	8/2/06	Online article.	400	\$353
6	www.afro.com/balt.aspx	8/11/06	Online article.	430	\$380
7	www.baltimoreexaminer.com	8/21/06	Online article.	22,500	\$630
8	www.baltimoreexaminer.com	8/31/06	Online article.	22,500	\$630
Onlin	ie	Date	Description	Gross Impressions	Estimated Value
1	www.washingtonpost.com	7/18/06	Online article.	734,700	\$20,572
2	www.baltimoreexaminer.com	7/18/08	Online article.	22,500	\$630
3	www.hometownannapolls.com	7/18/06	Online article.	4,900	\$137

4	www.washingtonexaminer.com	7/19/06	Online article.	22,500	\$630
5	www.thegazette.net	7/19/06	Online article.	400	<b>\$11</b>
6	www.connectionnewspapers.com	7/19/06	Online article.	2,100	\$59
7	www.WUSA9.com	7/20/06	Online article.	2,500	\$70
8	www.washingtonpost.com	7/20/06	Online article.	787,000	\$22,036
9	www.timescommunity.com	7/25/06	Online article.	2,600	\$73
10	www.wtopnews.com	8/2/06	Online article.	9,460	\$265
11	www.wtopnews.com	8/3/06	Online article.	9,480	\$265
12	www.nbc4.com	8/4/06	Online article.	11,712	\$328
CLEAN	AIR PARTERNS GRAND TOTAL			Gross Impressions	Estimated Value
3 · 5 · 1				1,845,230	\$98,484
CODE F	ED TOTAL			Gross Impressions	Estimated Value
				6,732,549	\$175,064
PROGF	AM GRAND TOTAL			Gross Impressions	Estimated Value
		, ——		8,577,779	\$273,548

<sup>\*</sup>While PRR has included this media hit in the values, a recording of the hit was not available for purchase.



Clean Air Partners
Earned Media Values
As of 9/8/06

	•		A3 01 9/0/00		
Radio		Date	Description	Gross Impressions	Estimated Value
1	WTOP-AM (CBS)	5/21/06	3-minute news story aired between 3:00pm and 6:00pm.	44,400	\$7,350
2	WMAL-AM (ABC)	5/17/06	*3-minute 53-second news story aired between 10:00am and 10:30am.	24,000	\$8,153
3	WAMU-FM (NPR)	5/30/06	1-minute 30-second news story aired between 7:00am and 11:00am.	24,000	\$3,675
4	WTOP-AM (CBS)	8/1/06	3-minute 49-second news story aired between 7:00am and 8:00am.	70,300	\$10,682
5	WYPR-FM (NPR)	8/2/06	4-minute 16-second news story aired between 9:00am and 12:00pm.	20,000	\$7,464
6	Metro Networks	8/2/06	1-minute news story aired between 7:00am and 11:00am.	120,000	\$10,500
Televi	sion	Date	Description	Gross Impressions	Estimated Value
1	News Channel 8	5/17/06	3-minute 53-second news story aired during 10:00am news hour.	70,000	\$10,878
2	News Channel 8	7/18/06	3-minute 36-second news story aried during 10:00am news hour.	70,000	\$10,080
3	WBFF-TV (FOX)	7/27/06	4-minute 4-second news story aired during 7:00am news hour.	31,000	\$5,691
4	WJZ-TV (CBS)	7/27/06	1-minute 57-second news story aired during 5:00pm news hour.	25,000	\$3,413
News	paper	Date	Description	Gross Impressions	Estimated Value
1	The Baltimore Afro American	8/11/06	29 inch article with color photo.	88,000	\$5,426
2	Baltimore Examiner	8/21/06	20 inch article with color photo in Local section.	550,000	\$7,006
3	Baltimore Examiner	8/31/06	12 inch article with color photo in Local section.	550,000	\$5,043
Online		Date	Description	Gross Impressions	Estimated Value
1	blogs.usatoday.com/weather/	5/18/06	Online article.	74,600	\$84
2	www.nbc4.com	7/16/06	Online article.	13,900	\$378
3	www.wjz.com	7/27/06	Online article.	3,700	\$95
4	www.wtopnews.com	8/2/06	Online article.	20,500	\$574

5	www.wypr.org	8/2/06	Online article.	400	\$353
6	www.afro.com/balt.aspx	8/11/06	Online article.	430	\$380
7	www.examiner.com	8/21/06	Online article.	22,500	\$630
8	www.examiner.com	8/31/06	Online article.	22,500	\$630

GRAND TOTAL	Gross Impressions	Estimated Value
	1,845,230	\$98,484

<sup>\*</sup>While PRR has included this media hit in the values, a recording of the hit was not available for purchase.